

I CLAIM:

1. A method of inhibiting tumor cell growth in a tumor cell that over-expresses thioredoxin comprising contacting said tumor cell with a cell growth inhibiting effective amount of an inhibitor of thioredoxin expression.
2. A method of reducing inhibition of apoptosis in tumor cells that over-express thioredoxin comprising contacting said tumor cells with an effective amount of an agent that inhibits thioredoxin.
3. A method of identifying an agent that inhibits tumor cell growth in cells that over-express thioredoxin comprising
 - measuring thioredoxin expression in a first sample of said cells;
 - contacting a second sample of said cells with an agent to be tested;
 - measuring expression of thioredoxin in said second sample;
 - comparing expression of thioredoxin in said first sample and said second sample;
 - whereby a decrease in expression of thioredoxin in said second sample is indicative of an agent that inhibits tumor cell growth.
4. A method of identifying an agent that reduces inhibition of apoptosis in a tumor cell that over-expresses thioredoxin comprising
 - measuring thioredoxin expression in a first sample of said cells;
 - contacting a second sample of said cells with an agent to be tested;
 - measuring expression of thioredoxin in said second sample;
 - comparing expression of thioredoxin in said first sample and said second sample;
 - whereby a decrease in expression of thioredoxin in said second sample is indicative of an agent that reduces inhibition of apoptosis.

5. A method of identifying an agent that reduces inhibition of apoptosis in a tumor cell growth.
6. A method of stimulating cell growth comprising introducing a nucleic acid encoding a human thioredoxin having Ser at amino acid residue 73 under conditions whereby said nucleic acid is expressed.
7. A composition comprising an agent that is useful in reducing or eliminating thioredoxin-associated apoptosis inhibition and an acceptable carrier.
8. A composition comprising an agent that is useful in inhibiting thioredoxin stimulated cell growth and an acceptable carrier.